

**ABSTRACT**

A method for making a thermal insulating material includes the steps of:

- 5 providing a chamber, placing hollow geometric shapes in the chamber, closing the chamber, evacuating air from the chamber, feeding a slurry into an adjacent slurry chamber, pressurizing the slurry chamber and forcing the slurry in to the sphere chamber around the spheres against a fibrous material adjacent a side wall of the sphere chamber. The fibrous material allows capillary wicking of the liquid from the slurry around the spheres. Due to
- 10 this pressure the spheres and slurry are semi dried into a green state. The material in its green state green is subsequently dried and fired to form the insulating material.